

# SODIM

INSTRUMENTATION

*Contrace, this French  
company markets an instrument that  
will record smoking behaviors* *Don*

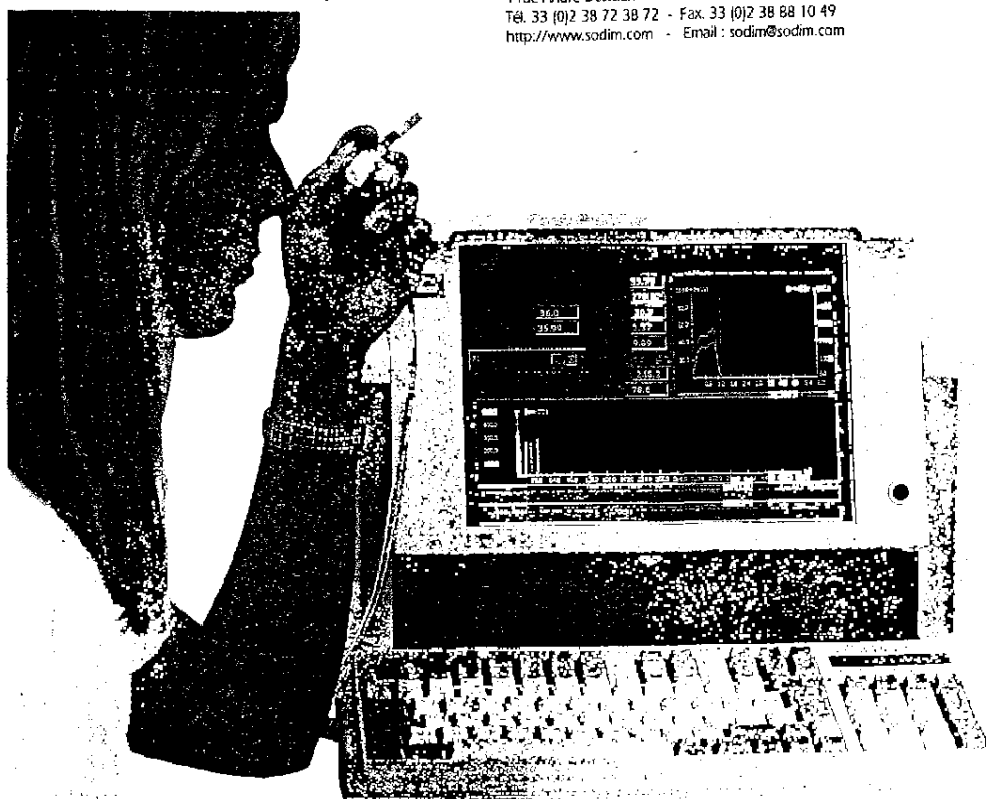
## SODIM

INSTRUMENTATION

*Peter,  
This may be of  
some use in  
your studies  
DAVE Rockwell*

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# Smoking puff analyser

PM3003745657

## PURPOSE

Human smoking behaviour recorder :  
Measurement of flow, pressure drop, duration and interval between puffs ; calculation of the volume of the puffs ; recording and processing of the data.

## ADVANTAGES

Compact and portable apparatus.  
Easy to use and to calibrate.  
Downloading of the data to a smoking duplicator (optional).  
Data processing possible with another software on the same computer (i. e. Excel).  
The effect of the smoking on the measurement is taken into account, as well as the ambient atmospheric pressure.  
Storage of a large number of smoking profiles.

## PRINCIPLES OF MEASUREMENT

The subject smokes a cigarette, held in a special holder which is connected by two flexibles tubes to the built in pressure and flow measuring transducers. Graphs of pressure and flow for each puff and the consequent characteristics of volume, duration, and elapsed time since the previous puff are displayed in real time. At the end of smoking, results are automatically recorded in a smoking profile file.

## APPARATUS STRUCTURE

- A transportable P.C. computer with a built in 12" color TFT screen.
- An integrated pressure, flow and atmospheric pressure transducers board.
- A cigarette holder made in an alimentary plastic material.

## TECHNICAL SPECIFICATIONS

Cigarette holder	: for 7.9 mm Diameter cigarettes
	: develops a PD of 2.25 mm WG at a flow rate of 17.5 ml/sec
Measurement limits	: Flow rate : 160 ml/s
	: Pressure drop : 1000 mm WG
Scan rate	: 18.2 readings/s (Pressure and Flow)
Resolution	: Pressure drop : 0.1 mm WG
	: Flow : 0.1 ml/s
	: Atmospheric pressure : 0.1 mbar
Input	: Pressure drop between butt of cigarette and ambient atmospheric pressure
	: Pressure difference between butt of cigarette and mouth of smoker
	: Atmospheric pressure
Output	: Square wave signal (frequency proportional to flow) for driving the duplicator
Power supply	: 110/220V, 50/60Hz
Dimensions L x H x Depth	: 405 x 245 x 215 mm
Weight	: 7 kg.